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## Why are you here again? Concordance between consumers and providers about the primary concern in recurring psychiatric visits

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### Abstract

Patient-centered care has become increasingly important over the last decade, both in physical and mental health care. In support of patient-centered care, providers need to understand consumers' primary concerns during treatment visits. The current study explored what primary concerns were brought to recurring psychiatric visits for a sample of adults with severe mental illness ( $N = 164$ ), whether these concerns were concordant with those recognized by providers, and which factors predicted concordance. We identified 17 types of primary concerns, most commonly medications and symptoms, with only 50% of visits showing evidence of at least partial agreement between consumers and providers. Contrary to expectations, consumer demographics, activation, trust, and perceptions of patient-centeredness were not predictive, while greater preferences for autonomy predicted poorer agreement. Our findings highlight the need for interventions to promote a shared understanding of primary concerns in recurring psychiatric visits. Further attention is needed to ensure the provision of patient-centered care such that consumer concerns are acknowledged and addressed within recurring psychiatric visits.

### Keywords

severe mental illness; communication; patient-centered care; shared decision-making

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## 1. Introduction

Patient-centered care has become increasingly important over the last decade, both in physical and mental health care (Institute of Medicine, 2001; National Research Council, 2006). Patient-centeredness is a multifaceted concept that centers around two components: consumer involvement in care and the individualization of care (Robinson et al., 2008). In line with these components, a key concept is shared decision-making (SDM), where consumers and providers work collaboratively to address treatment needs (Charles et al., 1997). At the most basic level, providers need to understand consumers' primary concerns during a treatment visit (Makoul and Clayman, 2006). If the main concern is not understood, further SDM may be hindered and rapport may be damaged. The purpose of the current study was to explore the content of primary concerns in psychiatric treatment as reported by consumers and providers, and to examine levels of concordance and the predictors of that concordance.

We found no studies specifically addressing agreement about primary concerns in psychiatry. In general medicine, high levels of agreement between patients and providers are typically found (80-90%) (Boland et al., 1998; Jackson, 2005; Gross et al., 2013), except when comparing patients' reports of events in the appointment with providers' reports in the medical chart (DiMatteo et al., 2003). Although agreement has not been directly examined in psychiatry, related research is informative. One study examined concordance in ranking the importance of treatment goals. Results indicated that psychiatrists tended to value traditional treatment goals (e.g., decrease psychotic symptoms) more highly than consumers who valued practical, tangible goals (e.g., improved capacity for work) (Bridges et al., 2011). Another study showed that more than 40% of psychiatrist-consumer pairings were discrepant in their appraisal of medication adherence, with consumers more often identifying themselves as adherent (De las Cuevas et al., 2013). In addition, shared decision-making studies have found 79-87% agreement between consumers and psychiatric providers on a treatment decision as rated by observers from audiotaped sessions (Fukui et al., 2013; Matthias et al., 2013).

Understanding correlates of concordance between consumers and providers is also beneficial. Misunderstanding consumers' main concerns could damage the therapeutic relationship; alternatively, factors of the relationship may instead lead to poor communication and increased chances of misunderstanding the main concerns. One factor that may impact the consumer-provider relationship, patient-centeredness, has repeatedly been linked to improved consumer outcomes such as self-management and satisfaction with care (Rathert et al., 2012). It is possible higher levels of perceived patient-centeredness reflect higher quality provider-consumer communication which may foster trust and the sharing of information, and in turn, higher levels of agreement on the consumer's primary concerns. In studies outside of mental health, trust in medical provider has been linked to help-seeking and follow-up, consumer disclosure of information, treatment adherence, and satisfaction with care (Safran et al., 1998; Hall et al., 2002; Bova et al., 2006). Research in psychiatry indicates that consumers consider trust in physician to be central to a positive therapeutic relationship and to receiving quality services (Laugharne and Priebe, 2006). Further, poor quality provider communication has been associated with lower trust (Ommen

et al., 2011). Consumers with lower levels of trust may have poorer communication with their provider, and we hypothesize lower rates of concordance on their reported primary concern.

Consumer-specific traits may also impact the quality of communication during appointments. Two constructs particularly relevant to the decision-making literature include autonomy preference and patient activation. Autonomy preference is the degree to which individuals wish to be informed about their condition and participate in decisions related to their illness (Ende et al., 1989). Studies in mental health have consistently shown that consumers have a desire to participate in their own care (Hamann et al., 2005; Hamann et al., 2007a; O'Neal et al., 2008), and the broader literature has linked consumer participation in care to a range of positive health outcomes (Guadagnoli and Ward, 1998; Wilson et al., 2010). Additionally, physician support for consumers' desired level of autonomy has been associated with improved health outcomes and treatment satisfaction (Williams et al., 1998; Jahng et al., 2005).

While autonomy preference represents the desire to participate, patient activation refers to the skills, knowledge, and confidence needed to participate in managing chronic illness (Hibbard et al., 2004). In mental health, higher patient activation has been linked to improved illness self-management, increased recovery orientation, and retention in outpatient care (Alegría et al., 2008; Salyers et al., 2009; Green et al., 2010; Kukla et al., 2013) in addition to being directly linked to improved communication (Alegría et al., 2009). Consumers who have stronger autonomy preferences and patient activation may have more interests or ability to advocate for themselves during appointments, more clearly describe their concerns, and participate in their own care, resulting in increased agreement about primary concerns.

Consumer demographic characteristics may also impact agreement on the primary concern of a psychiatric visit. For example, there is evidence outside of psychiatry that those who are White (Levinson et al., 2005), female, more educated, and older are more likely to want to engage in shared decision-making with their provider (Say et al., 2006). If consumers' communication styles vary with certain demographic characteristics, it is possible that agreement about the primary concern will also vary. Finally, agreement may vary based on the severity of symptoms or functional impairment, which could interfere with communication and a shared understanding of primary concerns during a visit. The current study includes consumers who are receiving services from either an Assertive Community Treatment (ACT) team or from an outpatient clinic in a community mental health center. Given that ACT teams provide highly intensive services for those who have histories of difficulty engaging in care (Salyers and Tsemberis, 2007), the type of services being received may predict agreement levels.

The current study explored what primary concerns are brought to recurring psychiatric visits for a sample of adults with severe mental illness, whether these concerns are concordant with those recognized by providers, and which factors predict concordance. We hypothesized that greater autonomy and activation in treatment as well as indices tapping the consumer-provider relationship (trust and perceptions of patient-centeredness) would predict

higher levels of agreement about primary concerns. Furthermore, we hypothesized that consumers who were female, older, more educated, and White would have better levels of agreement with their providers, but that those receiving services from ACT teams would have lower agreement (compared to those in outpatient clinics).

## 2. Methods

### 2.1. Participants

Data for this study were obtained during baseline interviews of a study on CommonGround, an intervention designed to increase shared decision-making in psychiatric treatment (Deegan et al., 2008; Drake et al., 2010; Stein et al., 2013). Participants included four psychiatric prescribers (two psychiatrists, two nurse practitioners) serving consumers in one of four clinics within a community mental health center (two outpatient teams and two ACT teams). Consumers receiving services in this community mental health center typically see psychiatric providers every one to three months; these visits typically entail medication management and a psychiatric check-in by providers, as well as discussion of any psychiatric concerns brought by consumers. Further involvement in services varies widely across individuals and clinics, but multiple opportunities are available, such as case management, group and individual therapy, addiction services, and vocational support.

For the primary study, consumers were approached and recruited when they arrived for a psychiatric visit, unless clinic staff requested we not approach (e.g., a consumer was in crisis). Consumers were screened for eligibility by trained research assistants before completing an informed consent process with a brief test of understanding. To be included in the study, consumers had to be fluent in English, be willing to be interviewed 3 times over the course of 18 months, and agree to be audio recorded in 3 separate psychiatric visits. Consumers were not eligible to participate in the study if they had imminent plans to leave their treatment team due to the longitudinal nature of the original study.

In total, 307 consumers were approached by the study team. A total of 167 consumers (54.4%) participated in the study. Another 21 (6.8%) consumers agreed to participate but were unable to pass a test of understanding for informed consent. Ninety-three (30.3%) consumers declined to participate, primarily for lack of interest. A further 26 (8.5%) consumers were interested in the study but had conflicts preventing participation (e.g., no time on the day of their psychiatric visit). For this analysis, 3 visits did not have complete data from both consumer and provider, for a final sample size of 164.

### 2.2. Procedures

Interested consumers were read the informed consent and asked a series of 10 true-false questions about its content. If an individual passed the screening test and consented, the visit with the prescriber was audio recorded. The providers were given a short survey about the consumer before each visit and asked to fill it out immediately after seeing the consumer. After the visit, consumers were interviewed by trained research assistants. Interviews ranged from 30 minutes to 1 hour, and consumers were paid \$20 for their participation; providers

were not paid for their time. All procedures for this study were approved by the [university] Institutional Review Board.

### 2.3. Measures

We collected demographic information from each consumer regarding age, sex, race, and education. Several measures relevant to the CommonGround intervention were included as well as a number of recovery-related indices. Detailed below are the measures used for the current study.

Primary concern for the visit from the consumer's point of view was obtained in an open-ended question during the interview following the visit with the provider, asking: "What was your primary concern today?" Providers reported the reason for the visit on the survey they completed after the visit with each consumer, asking "What was the consumer's primary concern today?" Although no additional instructions were provided with the prompts, consumers and providers were allowed to report multiple primary concerns, or to report that there was no primary concern for the visit.

The Autonomy Preference Index (API) contains 14 items and is designed to assess preferences related to autonomy in medical decision-making (Ende et al., 1989). The API has two subscales, information-seeking and decision-making autonomy, with items rated from 1 = strongly disagree, to 5 = strongly agree. The API has been found to have good internal consistency and test-retest reliability (Ende et al., 1989), and has been used in mental health samples (Hamann et al., 2005; O'Neal et al., 2008). However, data from our sample exhibited poor item-total correlations for three items; thus, items 4 and 6 on the decision-making subscale, and item 5 on the information-seeking subscale were removed and subscale scores were recalculated. Deleting those left four items in the decision making subscale ( $\alpha = 0.68$ ) and seven in the information seeking subscale ( $\alpha = 0.87$ ).

The Health Care Relationship Trust Scale (HCRT) was developed to assess the level of trust patients with chronic medical conditions hold for their health care providers (Bova et al., 2006). The HCRT has 15 items rated from 0 = none of the time, to 4 = all of the time, and assesses three domains: interpersonal communication, respectful communication, and professional partnering skills/collaborative trust. A total score was used in this study. The original study displayed good internal consistency, but lower test-retest reliability after a 2-4 week period ( $r = 0.59$ ) (Bova et al., 2006). In the current sample, the HCRT had strong internal consistency ( $\alpha = 0.91$ ).

The Patient Activation Measure-Mental Health (PAM-MH) has 13 items that assess a consumer's level of activation in mental health treatment (Green et al., 2010), adapted from a general measure for chronic physical illness (Hibbard et al., 2004). Scores range from 0-100, with 100 indicating the highest level of activation. The PAM-MH has been validated for use in populations with severe mental illness and has been found to have good internal consistency (Salyers et al., 2009; Green et al., 2010). In the current study, the PAM-MH demonstrated acceptable internal consistency ( $\alpha = 0.78$ ).

The Patient Perception of Patient-Centeredness questionnaire (PPPC) has 14 items with variable response options (Stewart et al., 2004). The PPPC produces a total score and three component scores: exploring disease and illness experience, finding common ground, and understanding the whole person (Stewart et al., 2003). Traditionally the PPPC is coded so that lower scores reflect more positive perceptions; however, for this study we scored it such that higher scores reflected more positive perceptions in order to remain consistent with other utilized measures. The PPPC has shown adequate internal consistency in the past (Stewart et al., 2003) and strong internal consistency in this sample ( $\alpha = 0.89$ ).

## 2.4. Analyses

Qualitative, content analyses were conducted by a team including a clinical psychologist, master's level project manager, and two doctoral students in clinical psychology. Using an open-coding process, the team examined a subsample of the primary concerns provided (by both consumers and providers) and labeled them with one or more codes describing the content of the concern. The study team then met to assemble a codebook of each type of concern. This was an iterative process in which the codebook was altered several times to more accurately reflect the data. The primary concerns were then coded by at least two members of the study team using the final version of the codebook. All discrepancies were discussed and agreement was reached for all primary concerns.

After coding the concerns, each set of consumer and provider concerns were rated for agreement by at least two members of the study team. We looked at pairs of responses and rated them as reflecting no agreement, partial agreement, or full agreement. Sets of consumer-provider concerns could receive a rating of partial agreement in two ways. First, if similar concerns were reported but not clearly the same (e.g., "overall mental health" and "auditory hallucinations"), a rating of partial was given. Second, if multiple concerns were reported by either member of the pair, and at least one (but not all) concerns were identified by the other in the pair, a rating of partial was given. In this way, agreement may have been present for one of multiple reported concerns, but not others. Inter-rater consensus was reached for all sets of concerns, with discrepant ratings discussed among the study team. Coders were able to reliably discern no agreement, partial agreement, and full agreement ( $\kappa = 0.81$ ).

For the series of predictive analyses, bivariate relationships were first examined between level of agreement and consumer demographics (i.e., age, sex, race, education), autonomy preference (decision-making and information-seeking), activation, and consumer-provider relationship (trust and perceptions of patient-centeredness). Ordered logistic regression (i.e., cumulative logit model) (Allison, 2001) analysis was then conducted to examine how consumer demographics, autonomy preference, activation, consumer-provider relationship, and service types (i.e., ACT & outpatient) predicted our ratings of provider-consumer agreement. In this study, consumers were nested within clinics (ACT & outpatient). A mixed effects logistic regression model is an ideal strategy accounting for the nested data structure. However, given small cluster size, we created a dummy code for clinic memberships and included it in the logistic regression model to account for the effect.



Because we hypothesized that ACT consumers would have less concordance, the clinic effect was considered. Analyses were conducted in SAS version 9.3.

### 3. Results

The sample was predominantly male (N=93, 56.7%) and Black (N=91, 55.8%). Most had less than a high school education (N=68, 41.5%), but a large proportion had completed high school (N=60, 36.6%) or had some college or more education (N=36, 22.0%). Participants' mean age was 44.1 (SD = 10.4). Coder ratings of agreement about primary concerns for the visit indicated that for 50% of encounters, consumers and providers had no agreement, for 30% of encounters they had partial agreement, and for 20% of encounters they had full agreement.

Qualitative analyses revealed 17 types of primary concerns identified by either consumers or providers. See Table 1 for descriptions and frequencies of each code. For consumers, medication was the most often mentioned category, followed by symptoms and reference to a follow-up visit. For providers, the most common category was symptoms, followed by medication and employment or education.

Bivariate analyses showed decision-making autonomy was associated with lower levels of agreement (See Table 2). Demographic variables were not significantly related to level of agreement. Multivariate regression results (Table 3) revealed that autonomy preferences were predictive of agreement, but in the opposite direction of hypotheses. For a one unit increase in preference about autonomous decision-making, odds of being in a lower agreement category increased by about 1.7 times. A trend in the same direction was observed for autonomy in information-seeking. Further, as hypothesized, outpatient provider-consumer pairs tended to have higher agreement compared to ACT provider-consumer pairs (OR = 2.5). Nagelkerke  $R^2$  (max rescaled  $R^2$ ) was .14 ( $\chi^2_{(11)} = 20.7$ ,  $p < 0.05$ ).

### 4. Discussion

This is the first study we are aware of that examined primary concerns brought to recurring psychiatric visits, agreement levels of concerns between consumers and providers, and predictive factors of agreement. We identified 17 types of primary concerns, most commonly medications and symptoms, with only 50% of visits showing evidence of at least partial agreement between consumers and providers. Our predictive analyses revealed that consumers who had greater preferences for autonomy and were ACT service users (compared to outpatient service) had poorer agreement. Consumer demographic variables, relationship variables (trust, perceptions of patient-centeredness), and consumer activation in treatment did not predict agreement levels.

In our sample, both consumers and providers most frequently identified medication and symptoms as top reasons for the visit. However, it is interesting to note that providers mentioned non-psychiatric topics such as employment/education, finances, interpersonal concerns, and physical health as the next most common topics. In contrast, consumers more frequently mentioned issues related to follow-up, side effects, and "none". These findings

are inconsistent with findings from Bridges et al. (2011) that psychiatrists tended to value traditional treatment goals (e.g., symptoms, medication), while consumers valued tangible goals (e.g., work). Whereas providers acknowledged broader (non-psychiatric) topics brought by consumers in our study, consumers seemed to narrowly identify primary concerns within more traditional psychiatric topics. Although we did not examine the content of the actual session in the current study, prior work suggests that in sessions, providers tend to initiate more scientific-based discussions (e.g., pros and cons, uncertainties around treatment) than preference-based discussions (e.g., consumer preferences, alternative possibilities) (Fukui et al., 2014). Discussions about medication led by providers frequently occur around symptom reduction, rather than how the medication or non-medication options can help consumers work toward recovery (Deegan, 2005, 2007). It is possible that the medication and symptom discussions are more salient for consumers after the visit when we asked about primary concerns. Alternatively, consumers may perceive that these are supposed to be primary topics in recurring psychiatric visits, and thus report them as a result of social desirability bias.

While both consumers and providers frequently identified medication and symptoms as main concerns in recurring psychiatric visits, these similarities did not translate to high levels of concordance at the individual level. Our rates of concordance were considerably lower than concordance rates reported in medicine of 80-90% (Boland et al., 1998; Gross et al., 2013), and were more in line with studies comparing concordance between patient report and chart review for events occurring during visits (DiMatteo et al., 2003). There are several possible reasons for the low level of agreement in our study.

First, the nature of the visits we were studying may explain lower concordance. Visits were frequently recurring (typically every 1-3 months and potentially more often for the ACT teams where consumers could drop-in to see the provider). Frequent visits may not facilitate new concerns from consumers, but rather encourage discussion of ongoing, maintenance-related items, such as tweaking a medication or addressing recurrent symptoms, which may not be viewed as a “primary” concern by consumers or providers. This might also result in relatively higher frequencies of “follow-up” or “none” as primary concerns.

Second, the low level of agreement in our study may stem from an absence of agenda setting (whereby the consumer and/or provider set out a list of items to discuss during their time together). As prior research shows, agenda setting is often omitted in recurring psychiatric visits (Frankel et al., 2013). Agenda setting has been identified as critical when establishing the partnership between providers and consumers (Fortin et al., 2012). However, attempts to set the agenda or revisit agenda items may get buried in routine and recurrent visits. Research in primary care has shown that when physicians do not solicit patient concerns at the beginning of the visit (as is done with proper agenda setting), late-arising concerns occur more often (Beckman et al., 1985; Marvel et al., 1999). Late-arising concerns occur toward the end of a visit, making them difficult to fully address, and sometimes these concerns may not be addressed at all. Agenda-setting with a full solicitation of consumer concerns acts to reduce the occurrence of late-arising concerns and ensure that all concerns are prioritized at the beginning of a visit (Marvel et al., 1999).



Third, while agenda-setting refers to a shared understanding of goals for a particular visit, shared understanding of broader goals may also be important for concordance. Goal-setting has been shown to increase involvement in treatment and enhance ownership of the recovery process in consumers with severe mental illness (Levack et al., 2006). It may be that more frequent and explicit goal-setting processes in recurring psychiatric visits could improve concordance about the main concerns. Alternatively, checking with the consumer about the importance of the goal may clarify its status as a main concern in the visit.

In examining predictors of agreement, greater autonomy preferences predicted poorer agreement. Though our findings countered hypotheses, there is some research to suggest that greater autonomy preferences may not necessarily facilitate agreement. For example, Hamann, Cohen, and colleagues (2007b) argued that greater preference for autonomy may be a result of dissatisfaction with care, leading consumers to feel an increased need to advocate for themselves and/or seek information independently from their provider. Our data also supports this trend -- greater decision-making autonomy was associated with lower levels of trust and perceptions of patient-centeredness (see Table 2). In addition, some research in primary care indicates that those with the strongest relationships with their providers preferred a more passive role in decision-making (i.e., less autonomy; Kraetschmer et al., 2004). Our research infers that stronger autonomy preferences could facilitate consumers' own acknowledgement and advocacy about their concerns, but if providers misperceive them, it may lead to poorer concordance.

Our regression analysis also showed that the type of clinic in which consumers received services (ACT vs. outpatient care) predicted agreement level. Consistent with expectations, those attending the ACT clinics had poorer agreement than those receiving outpatient services. This may reflect the severity of symptoms of consumers, as ACT services are typically only provided to consumers with high rates of hospital use and/or inpatient stays. It may also be that providers on ACT teams differed from those on outpatient teams, but with the small number of providers, we could not adequately sort out provider from clinic effects. Further exploration in other samples is needed to parse out factors that may contribute to this finding.

Lastly, consumer demographics, patient activation, trust, and patient-centeredness were not significant predictors of agreement. While activation, trust, and perceptions of patient-centeredness are correlated with each other (see Table 2) and are considered to be important factors in shared decision-making practices, they did not predict higher concordance about primary concerns in our sample. Although concordance was generally poor, our participants rated high levels of trust and patient-centeredness about their providers. It could be that frequently recurring visits lend themselves to this pattern of findings; with established consumer-provider relationships, rapport may be strong, and consumers may not feel compelled to clarify the main concerns in each visit, regardless of activation levels. Alternatively, the lack of associations may in part be due to a statistical artifact of restricted range, as trust and perceptions of patient-centeredness (HCRT and PPPC) exhibited high mean scores and a number of participants reported the maximum possible score. Our high scores are similar to the findings in the initial validation study of the HCRT (Bova et al., 2006), but the PPPC did not exhibit a ceiling effect in its initial validation (Stewart et al.,

2004). It is possible the scale operates differently in this population, or at least our sample. Further research is needed to examine trust and perceptions of patient-centeredness in this population and how these constructs relate to consumer-provider communication.

As an initial study of consumer-provider concordance, our study opens the way into a new area of research in mental health. However, we are limited in making generalizations by a smaller sample in a single service setting, and although we did include different types of services (ACT and outpatient), we had only four providers. In addition, consumers were being recruited for a larger study, and needed to pass a cognitive screener to be enrolled. It is possible that we excluded people who may have more difficulty in describing primary concerns due to greater cognitive difficulties, which could further lower the rates of agreement we found. Further, given the recurring nature of the visits used in this study, consumers may not have a specific primary concern for their visit, but may have reported such “standard” concerns as medication or symptoms. In this vein, consumers may have answered in a socially desirable manner, indicating results may not accurately represent true concerns or may over-represent “standard” concerns. Future work may ask consumers whether they had any primary concerns for their visit before asking what it was. Further, use of the word “primary” may have been interpreted by some participants as a request for just one concern, perhaps imposing an artificial ranking of concerns in the visit upon the consumer or provider. Agreement level may have been different if participants had just been asked what concerns they had in the visit, as opposed to what was their primary concern. Finally, a general limitation which could be applied to any shared decision-making study includes a lack of good measurement tools (e.g., see Geiger and Kasper, 2012). Our study is not an exception, including the ceiling effects for the HCRT and PPPC as well as lower reliability for the API in our sample.

#### 4.1. Conclusions and Implications for Practice

In conclusion, our results suggest that levels of agreement about primary concerns in a psychiatric visit are variable, with a large percentage of visits indicating no agreement. Low agreement may be particularly problematic for those with high levels of preferences for decision-making autonomy and for those on ACT teams. The low level of agreement found in our study has implications for clinical work. In our sample, primary concerns were only agreed upon (at least partially) in half of the sample; this indicates that for half of our sample, providers and consumers were not on the same page regarding concerns of most importance during the psychiatric visit. This could have negative implications for consumers’ treatment outcomes, and should be targeted for improvement in mental health services. Our Table 1 could easily be used to create a checklist for consumers to fill out and share with the provider in each visit. Other tools are also available to increase understanding between consumers and providers. For example, CommonGround includes peer support and computerized tools to assist in shared decision-making (Deegan et al., 2008). Other interventions train consumers to ask questions and get information about treatment from providers, which can increase attendance, retention in treatment, and patient activation (Alegría et al., 2008). An intervention such as this may be modified to also train consumers on how to communicate their primary concerns clearly at the beginning of each visit. Furthermore, use of patient-centered practices such as purposefully setting an agenda at the

beginning of psychiatric visits (Frankel et al., 2013) may serve to solicit primary concerns early in the visit, perhaps increasing rates of agreement. Given the fundamental role of having a shared understanding of primary concerns to facilitate collaboration, further attention is needed to ensure the provision of patient-centered care such that consumer concerns are acknowledged and addressed within recurring psychiatric visits.

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## References

- Alegria M, Polo A, Gao S, Santana L, Rothstein D, Jimenez A, Hunter ML, Mendieta F, Oddo V, Normand S-L. Evaluation of a patient activation and empowerment intervention in mental health care. *Medical Care*. 2008; 46:247. [PubMed: 18388839]
- Alegria M, Sribney W, Perez D, Laderman M, Keefe K. The role of patient activation on patient-provider communication and quality of care for US and foreign born Latino patients. *Journal of General Internal Medicine*. 2009; 24:534–541. [PubMed: 19842003]
- Allison, P. *Logistic Regression Using the SAS System*. SAS Institute; Cary, NC: 2001.
- Beckman HB, Frankel RM, Darnley J. Soliciting the patient's complete agenda: a relationship to the distribution of concerns. *Clinical Research in Cardiology*. 1985; 33:714A.
- Boland BJ, Scheitel SM, Wollan PC, Silverstein MD. Patient-physician agreement on reasons for ambulatory general medical examinations. *Mayo Clinic Proceedings*. 1998; 73:109–117. [PubMed: 9472992]
- Bova C, Fennie KP, Watrous E, Dieckhaus K, Williams AB. The health care relationship (HCR) trust scale: development and psychometric evaluation. *Research in Nursing & Health*. 2006; 29:477–488. [PubMed: 16977644]
- Bridges JFP, Slawik L, Schmeding A, Reimer J, Naber D, Kuhnigk O. A test of concordance between patient and psychiatrist valuations of multiple treatment goals for schizophrenia. *Health Expectations*. 2011; 16:164–176. [PubMed: 21668795]
- Charles C, Gafni A, Whelan T. Shared decision-making in the medical encounter: what does it mean? (or it takes at least two to tango). *Social Science & Medicine*. 1997; 44:681–692. [PubMed: 9032835]
- De las Cuevas C, Peñate W, Sanz EJ. Psychiatric outpatients' self-reported adherence versus psychiatrists' impressions on adherence in affective disorders. *Human Psychopharmacology: Clinical & Experimental*. 2013; 28:142–150. [PubMed: 23475396]
- Deegan PE. The importance of personal medicine: a qualitative study of resilience in people with psychiatric disabilities. *Scandinavian Journal of Public Health*. 2005; 33:29–35. [PubMed: 16214720]
- Deegan PE. The lived experience of using psychiatric medication in the recovery process and a shared decision-making program to support it. *Psychiatric Rehabilitation Journal*. 2007; 31:62–69. [PubMed: 17694717]
- Deegan PE, Rapp C, Holter M, Riefer M. Best practices: a program to support shared decision making in an outpatient psychiatric medication clinic. *Psychiatric Services*. 2008; 59:603–605. [PubMed: 18511580]
- DiMatteo MR, Robinson JD, Heritage J, Tabbarah M, Tabbarah M, Fox SA. Correspondence among patients' self-reports, chart records, and audio/videotapes of medical visits. *Health Communication*. 2003; 15:393–413. [PubMed: 14527865]
- Drake RE, Deegan PE, Woltmann E, Haslett W, Drake T, Rapp CA. Comprehensive electronic decision support systems. *Psychiatric Services*. 2010; 61:714–717. [PubMed: 20592007]

- Ende J, Kazis L, Ash A, Moskowitz MA. Measuring patients' desire for autonomy: decision making and information-seeking preferences among medical patients. *Journal of General Internal Medicine*. 1989; 4:23–30. [PubMed: 2644407]
- Fortin, AH.; Dwamena, FC.; Frankel, RM.; Smith, RC. *Smith's patient-centered interviewing: an evidence-based method*. 3rd ed. McGraw-Hill Lange; New York, NY: 2012.
- Frankel RM, Salyers MP, Bonfils KA, Oles SK, Matthias MS. Agenda setting in psychiatric consultations: an exploratory study. *Psychiatric Rehabilitation Journal*. 2013; 36:195. [PubMed: 23815174]
- Fukui, S.; Matthias, MS.; Salyers, MP. Administration and Policy in Mental Health and Mental Health Services Research. Advance online publication; 2014. Core domains of shared decision-making during psychiatric visits: scientific and preference-based discussion.
- Fukui S, Salyers M, Matthias M, Collins L, Thompson J, Coffman M, Torrey W. Predictors of shared decision making and level of agreement between consumers and providers in psychiatric care. *Community Mental Health Journal*. 2013:1–8.
- Geiger F, Kasper J. Of blind men and elephants: suggesting SDM-MASS as a compound measure for shared decision making integrating patient, physician and observer views. *Zeitschrift für Evidenz, Fortbildung und Qualität im Gesundheitswesen*. 2012; 106:284–289.
- Green CA, Perrin NA, Polen MR, Leo MC, Hibbard JH, Tusler M. Development of the patient activation measure for mental health. *Administration and Policy in Mental Health and Mental Health Services Research*. 2010; 37:327–333. [PubMed: 19728074]
- Gross K, Schindler C, Grize L, Späth A, Schwind B, Zemp E. Patient–physician concordance and discordance in gynecology: do physicians identify patients' reasons for visit and do patients understand physicians' actions? *Patient Education and Counseling*. 2013; 92:45–52. [PubMed: 23481216]
- Guadagnoli E, Ward P. Patient participation in decision-making. *Social science & medicine*. 1998; 47:329–339. [PubMed: 9681902]
- Hall MA, Zheng B, Dugan E, Camacho F, Kidd KE, Mishra A, Balkrishnan R. Measuring patients' trust in their primary care providers. *Medical Care Research and Review*. 2002; 59:293–318. [PubMed: 12205830]
- Hamann J, Cohen R, Leucht S, Busch R, Kissling W. Do patients with schizophrenia wish to be involved in decisions about their medical treatment? *The American Journal of Psychiatry*. 2005; 162:2382–2384. [PubMed: 16330606]
- Hamann J, Neuner B, Kasper J, Vordermaier A, Loh A, Deinzer A, Heesen C, Kissling W, Busch R, Schmieder R. Participation preferences of patients with acute and chronic conditions. *Health Expectations*. 2007a; 10:358–363. [PubMed: 17986072]
- Hamann J, Cohen R, Leucht S, Busch R, Kissling W. Shared decision making and long-term outcome in schizophrenia treatment. *The Journal of Clinical Psychiatry*. 2007b; 68:992–997. [PubMed: 17685733]
- Hibbard JH, Stockard J, Mahoney ER, Tusler M. Development of the patient activation measure (PAM): conceptualizing and measuring activation in patients and consumers. *Health Services Research*. 2004; 39:1005–1026. [PubMed: 15230939]
- Institute of Medicine. U.S.. *Crossing the quality chasm: a new health system for the 21st century*. (0309072808). National Academies Press; Washington, DC: 2001.
- Jackson JL. Communication about symptoms in primary care: impact on patient outcomes. *The Journal of Alternative and Complementary Medicine*. 2005; 11:S51–S56. [PubMed: 16332187]
- Jahng KH, Martin LR, Golin CE, DiMatteo MR. Preferences for medical collaboration: patient–physician congruence and patient outcomes. *Patient Education and Counseling*. 2005; 57:308–314. [PubMed: 15893213]
- Kraetschmer N, Sharpe N, Urowitz S, Deber RB. How does trust affect patient preferences for participation in decision-making? *Health Expectations*. 2004; 7:317–326. [PubMed: 15544684]
- Kukla M, Salyers MP, Lysaker PH. Levels of patient activation among adults with schizophrenia: associations with hope, symptoms, medication adherence, and recovery attitudes. *The Journal of Nervous and Mental Disease*. 2013; 201:339–344. [PubMed: 23538980]

- Laugharne R, Priebe S. Trust, choice and power in mental health. *Social Psychiatry and Psychiatric Epidemiology*. 2006; 41:843–852. [PubMed: 17072503]
- Levack WM, Dean SG, Siegert RJ, Mcpherson KM. Purposes and mechanisms of goal planning in rehabilitation: the need for a critical distinction. *Disability & Rehabilitation*. 2006; 28:741–749. [PubMed: 16754571]
- Levinson W, Kao A, Kuby A, Thisted RA. Not all patients want to participate in decision making. *Journal of General Internal Medicine*. 2005; 20:531–535. [PubMed: 15987329]
- Makoul G, Clayman ML. An integrative model of shared decision making in medical encounters. *Patient Education and Counseling*. 2006; 60:301–312. [PubMed: 16051459]
- Marvel M, Epstein RM, Flowers K, Beckman HB. Soliciting the patient's agenda: have we improved? *Journal of the American Medical Association*. 1999; 281:283–287. [PubMed: 9918487]
- Matthias, MS.; Fukui, S.; Kukla, M.; Eliacin, J.; Bonfils, KA.; Firmin, RL.; Oles, SK.; Adams, EL.; Collins, LA.; Salyers, MP. Consumer and relationship factors associated with shared decision-making in mental health consultations. Manuscript submitted for publication; 2013.
- National Research Council. U.S.. Improving the quality of health care for mental and substance-use conditions: quality chasm series. The National Academies Press; Washington, DC: 2006.
- O'Neal EL, Adams JR, McHugo GJ, Van Citters AD, Drake RE, Bartels SJ. Preferences of older and younger adults with serious mental illness for involvement in decision-making in medical and psychiatric settings. *American Journal of Geriatric Psychiatry*. 2008; 16:826–833. [PubMed: 18827229]
- Ommen O, Thuen S, Pfaff H, Janssen C. The relationship between social support, shared decision-making and patient's trust in doctors: a cross-sectional survey of 2,197 inpatients using the Cologne Patient Questionnaire. *International Journal of Public Health*. 2011; 56:319–327. [PubMed: 21076932]
- Rathert C, Wyrwich MD, Boren SA. Patient-centered care and outcomes: a systematic review of the literature. *Medical Care Research and Review*. 2012; 70:351–379. [PubMed: 23169897]
- Robinson JH, Callister LC, Berry JA, Dearing KA. Patient-centered care and adherence: definitions and applications to improve outcomes. *Journal of the American Academy of Nurse Practitioners*. 2008; 20:600–607. [PubMed: 19120591]
- Safran DG, Kosinski M, Tarlov AR, Rogers WH, Taira DA, Lieberman N, Ware JE. The Primary Care Assessment Survey: tests of data quality and measurement performance. *Medical Care*. 1998; 36:728–739. [PubMed: 9596063]
- Salyers MP, Matthias MS, Spann CL, Lydick JM, Rollins AL, Frankel RM. The role of patient activation in psychiatric visits. *Psychiatric Services*. 2009; 60:1535–1539. [PubMed: 19880475]
- Salyers MP, Tsemberis S. ACT and recovery: integrating evidence-based practice and recovery orientation on assertive community treatment teams. *Community Mental Health Journal*. 2007; 43:619–641. [PubMed: 17514503]
- Say R, Murtagh M, Thomson R. Patients' preference for involvement in medical decision making: a narrative review. *Patient Education and Counseling*. 2006; 60:102–114. [PubMed: 16442453]
- Stein BD, Kogan JN, Mihalyo MJ, Schuster J, Deegan PE, Sorbero MJ, Drake RE. Use of a computerized medication shared decision making tool in community mental health settings: impact on psychotropic medication adherence. *Community Mental Health Journal*. 2013; 49:185–192. [PubMed: 22837104]
- Stewart, M.; Brown, JB.; Weston, WW.; McWhinney, IR.; McWilliam, CL.; Freeman, TR. Patient-centred medicine: transforming the clinical method. 2nd ed. Radcliffe Medical Press Ltd; Abingdon, United Kingdom: 2003.
- Stewart, M.; Meredith, L.; Ryan, BL.; Brown, JB. Centre for Studies in Family Medicine. The University of Western Ontario; London, Ontario, Canada: 2004. The Patient Perception of Patient-Centeredness Questionnaire (PPPC). [Working Paper #04-1]
- Williams GC, Freedman ZR, Deci EL. Supporting autonomy to motivate patients with diabetes for glucose control. *Diabetes Care*. 1998; 21:1644–1651. [PubMed: 9773724]
- Wilson SR, Strub P, Buist AS, Knowles SB, Lavori PW, Lapidus J, Vollmer WM. Shared treatment decision making improves adherence and outcomes in poorly controlled asthma. *American Journal of Respiratory and Critical Care Medicine*. 2010; 181:566. [PubMed: 20019345]

Table 1

## Primary Concerns

Code	Description	Example	Consumer Frequency	Provider Frequency
Medication	The primary concern is a medication refill, "med check", medication management or mentions a specific problem or action regarding medication. This can also include the client referencing using medication to address a problem. For example "Getting along with others and taking meds to help with that," would be coded as "Interpersonal Concerns" and as "Medication" because the medication is referenced in addressing the interpersonal problem.	"Lowering medication", "refills"	87 (53.0%)	45 (27.4%)
Symptoms	Any cognitive, affective, or behavioral symptoms of the illness, including hallucinations, delusions, depression, anxiety, hyper/hypoactivity, concentration, sleep, etc. This may also include the client seeking the doctor's opinion on their behavior or presentation. For example "seeing if the doctor notices any changes in me."	"anxiety", "depression", "auditory hallucinations"	38 (23.2%)	48 (29.3%)
Follow-up	The primary concern is for the client to have a follow-up appointment with his/her mental health doctor. Medication is not mentioned. If the consumer mentions a "doctor's appointment" assume it refers to an appointment with their psychiatrist unless otherwise specified (e.g. "primary care appointment").	"see prescriber", "tell prescriber how I am doing"	21 (12.8%)	11 (6.7%)
Side Effects	The primary concern relates to a side effect of medication such as dizziness, weight gain, tremors, etc.	"too sleepy from meds"	12 (7.3%)	4 (2.4%)
None	The text indicates that the client did not have a primary concern that day or the primary concern is for the client to participate in the research study.	"no concerns", "participate in study"	11 (6.7%)	11 (6.7%)
Living Situation	The primary concern relates to the client's living situation, whether that be location, lack of housing, housemates, or difficulty with rent.	"housing", "apartment"	9 (5.5%)	10 (6.1%)
Physical Health	The primary concern relates to a physical health condition or complaint such as diabetes or high blood pressure or seeking a primary care referral or getting a primary care appointment. The text may also refer to maintaining physical health such as engaging in "healthy habits" or being concerned about exercise. While some physical health concerns may also be side effects, we rated side effects only if explicitly linked to medication, e.g., "wants to reduce anxiety but wants to avoid weight gain."	"shaking", "blood pressure", "referral for primary care"	8 (4.9%)	13 (7.9%)
Employment/Education	Used if the concern mentions concerns with employment (including seeking, wanting, or maintaining a job) or education (such as taking classes or returning to school).	"employment", "getting a job", "get GED"	7 (4.3%)	20 (12.2%)
Interpersonal concerns	The primary concern involves a client's interactions with other people or the client's family, including issues of child custody. Note this code may frequently be	"relationship", "talk about family concerns"	7 (4.3%)	13 (7.9%)



Code	Description	Example	Consumer Frequency	Provider Frequency
	used in conjunction with other codes such as “stress.”			
Life Goals	The primary concern relates to a general phrases such as “goals” or “life goals” as well as more specific personal goals such as hobbies or achievements the individual is hoping to attain. This should not be used in conjunction with “get an apartment” (Living Situation) or “get a job” (Employment/Education) unless an additional goal in the respective domain is mentioned.	“I want to drive”	7 (4.3%)	3 (1.8%)
Other	This code is used for concerns that do not fit within other code categories or if the text is too vague to interpret. For example, a consumer’s statement of “Problem with direction – don’t have direction,” could reflect a symptom, concerns about the direction of treatment, or lack of life goals. Due to lack of context, “other” is the most appropriate category.	“spending free time”	7 (4.3%)	5 (3.0%)
Treatment Concerns	A general concern with the course of treatment or with a psychosocial intervention. Concerns specifically about medications should be coded “medication.”	“ECT treatments”, “feeling little control over treatment”	7 (4.3%)	7 (4.3%)
Substance Use	Includes alcohol, nicotine, and illegal drugs	“I need nicotine gum”	6 (3.7%)	5 (3.0%)
Stress	The client mentions an event or situation that is causing stress or anxiety. This may be a specific concern or a reference to general “stressors.”	“worry about losing mother”, “worry about finances”	4 (2.4%)	9 (5.5%)
Legal	Reference to a legal issue such as court commitment or criminal charges	“court commitment” “filing a lawsuit”	2 (1.2%)	3 (1.8%)
Finances	The primary concern pertains to benefits or monetary issues impacting the client, including health insurance, disability payments, payeehip or foodstamps.	“needs Medicaid”, “financial problems”,	1 (0.6%)	15 (9.1%)
Unsure	Unsure of the primary concern today (no consumer reported this).	“unsure about reason for visit”	N/A	2 (1.2%)

**Table 2**

## Correlations

	Mean (SD)	Decision Making Autonomy	Information Seeking Autonomy	Patient Activation	Trust in Provider	Perceptions of Patient- Centeredness	Consumer- Provider Agreement
Decision Making Autonomy	2.4 (0.8)	1					
Information Seeking Autonomy	4.4 (0.5)	-0.22**	1				
Patient Activation	55.4 (10.4)	-0.16*	0.19*	1			
Trust in Provider	50.1 (13.5)	-0.32**	0.14	0.16*	1		
Perceptions of Patient- Centeredness	3.3 (0.6)	-0.29**	0.05	0.32**	0.67**	1	
Consumer- Provider Agreement	-	-0.16*	-0.11	0.01	0.01	-0.03	1

\* Correlation is significant at the 0.05 level (2-tailed).

\*\* Correlation is significant at the 0.01 level (2-tailed).

*Note:* Pearson's correlations were used between continuous measures. Spearman's rankorder correlations were used for ranked data (i.e., all correlations with consumer-provider agreement).

**Table 3**

## Regression Results

	$\beta$	SE	Wald's $\chi^2$	df	<i>p</i>	95% CI		
						OR	Lower	Upper
Age (in year)	-0.08	0.02	1.13	1	0.289	0.98	0.95	1.02
Sex (1= female)	-0.25	0.32	0.61	1	0.433	0.78	0.41	1.47
Race (1= White)	-0.12	0.34	0.12	1	0.728	0.89	0.46	1.72
Education 1 (1= high school or GED)	0.11	0.35	0.09	1	0.765	1.11	0.56	2.23
Education 2 (1= college or beyond)	-0.17	0.41	0.16	1	0.685	0.85	0.38	1.92
Autonomy Preference (decision)	0.55	0.22	6.63	1	0.010	1.74	1.15	2.69
Autonomy Preference (information)	0.64	0.34	3.496	1	0.062	1.89	0.96	3.76
Patient Activation	-0.02	0.01	1.72	1	0.190	0.98	0.96	1.01
Trust in Provider	0.01	0.02	0.28	1	0.594	1.01	0.97	1.05
Provider Patient-Centeredness	0.53	0.37	2.01	1	0.156	1.70	0.81	3.59
Clinic (1=ACT)	0.90	0.35	6.57	1	0.010	2.46	1.24	4.97
Intercept 1	-5.01	2.20	5.18	1	0.023	-	-	-
Intercept 2	-3.50	2.19	2.57	1	0.109	-	-	-

*Note:* The model predicts the probability of being in a lower category (2= full agreement; 1=partial agreement; 0=no agreement)